

## **Rocky Flats Environmental Technology Site**

# RECONNAISSANCE LEVEL CHARACTERIZATION RADIOLOGICAL CHARACTERIZATION PLAN

## **GROUP 11 CLOSURE PROJECT**

(T690N, 827, 850, C865, 881C South, 881C East, 881G, 881H, 881 Tunnel, 883C, & 890)

### **REVISION 0**

November 20, 2001

Prepared by:  Jay Britten, Radiological Engineer	Date 1/19/01
Reviewed by:  Duane Parsons, Facility Characterization Coordinator	_Date
Reviewed by:  Paul Miles, Quality Assurance	Date <u>///26/</u> 0/
Approved by:  Kent Dori, Closure Project Facility Manager	Date 11/20/0)

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#### Notes and Assumptions:

- This characterization Plan was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols (07/26/00), and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities (02/14/01)
- PDSP Data Quality Objectives were used to develop this characterization plan

#### Instructions:

- 1 Verify characterization activities are on the Plan-of-the-Day (POD)
- 2 Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual
- 3 Verify personnel have appropriate training for the applicable tasks they will be performing
- 4 Comply with RWP requirements, if applicable
- 5 Comply with JHA and facility PPE requirements, as applicable
- 6 Inform the Facility Manager, or designee prior to starting characterization activities
- 7 Follow applicable characterization and sampling procedures
- 8 Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs
- 9 Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal
- 10 Collect and maintain all characterization paperwork in the Project File(s)
- 11 All radiological surveys shall be conducted in accordance with the sampling and instruction forms included in Group 11 Survey Package numbers GR11-A-001, GR11-A-002, GR11-A-003 and GR11-B-004, GR11-A-005, GR11-A-006, GR11-A-007, GR11-A-008, GR11-B-009, GR11-A-010, GR11-A-011, & GR11-A-012 Sample locations are denoted on scaled maps attached to each survey package



	No Non-Impacted Areas identified in this characterization unit Historical Site Assessment and process knowledge indicate no need for this	classification			No Class 1 Areas identified in this characterization unit Historical Site Accession	knowledge indicate no need for this classification
	N/A	ľ			N/A	0
	N/A				A/N	O
	N/A	C			N/A	O
	N/A	c		The state of the s	N/A	0
	N/A	°			N/A	0
	N/A	°			N/A	0
	N/A	Non-Impacted Totals			N/A	Class 1 Totals
	ΝΆ			1 A	N/A	
ted Areas	N/A		as		N/A	
Non-Impacted Areas	N/A		Class 1 Areas		N/A	

		No Class 2 Areas identified in this characterization	knowledge indicate no need for this class	describing the description of the description	
		N/A			_
		N/A		1	5
		N/A		6	5
		N/A		c	5
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		N/A		Class 2 Totals	
		ď Ž			
988		N/A			
Class 2 Areas		N/A			

	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL <sub>W</sub> Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL <sub>W</sub> A 5% scan on intenor & exterior surfaces will be biased towards areas of greatest potential for contamination Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL <sub>W</sub> . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL <sub>W</sub> . A 5% scan on intenor & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional blassed measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
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	15-random 15-biased 2-QC	15-random 10-biased 2-QC
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	563	78
	1281	321
	T690N (Interior & Exterior)	827 (Intenor & Extenor)
	ю	ო
848	G11-A-001	G11-A-002
Class 3 Areas	∢	∢

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

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	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL <sub>W</sub> . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL <sub>W</sub> . A 3% scan on interior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL <sub>w</sub> . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL <sub>w</sub> . A 3% scan on exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
	0	0
	46-random 64-biased	31-random 9-biased
	46-random 64-biased 6-QC	31-random 9-biased 2-QC
	349	120
	3038	2036
	11622	4002
	B850 (Internor)	B850 (Extenor)
	ю	က
as	G11-A-003	G11-B-004
Class 3 Areas	∢	Œ

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

Class 3 Areas	as									
∢	G11-A-005	က	C865 (Exterior)	88	NA	ις	15-random 2-QC	15-random	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL <sub>W</sub> Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL <sub>W</sub> A 5% scan on interior & exceed the DCGL <sub>W</sub> A 5% scan on interior & exceed the DCGL <sub>W</sub> A 5% scan on interior & exceed the DCGL <sub>W</sub> A 5% scan on interior & exceed the DCGL <sub>W</sub> A 5% scan on interior & exceed the DCGL <sub>W</sub> A 5% scan on interior & exceed the DCGL <sub>W</sub> A 5% scan on interior all bused measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP PDS Surveys are being conducted on the exterior surfaces of C865 only. Interior surfaces will be characterized using the Release Evaluation process during demolition
∢	G11-A-006	ო	881C SOUTH (Externor)	138	NA	7	15-random 2-QC	15-random	o	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL <sub>W</sub> Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL <sub>W</sub> A 5% scan on interior & extenor surfaces will be biased flowards areas of greatest potential for contamination Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP PDS Surveys are being conducted on the exterior surfaces of 881C only Interior surfaces will be characterized using the Release Evaluation process during demolition

	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGLw. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGLw. A 5% scan on interior & extenor surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP PDS Surveys are being conducted on the exterior surfaces of 881C only Interior surfaces will be characterized using the	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGLw. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGLw. A 5% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP
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# 1 # #	15-random 2-QC	15-random 15-biased 2-QC
	ω	4
	N/A	200
	118	804
	881C EAST (Externor)	881G & 881H (Intenor)
	r	m
94S	G11-A-007	G11-A-008
Class 3 Areas	∢	∢

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

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Biased

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	0	0
	15-random 10-biased	15-random 5-biased
	15-random 10-biased 2-QC	15-random 5-biased 2-QC
	37	
	792	135
	724	
	881G & 881H (Extenor)	881 Tunnel (Interior)
	ಣ	ю
as	G11-B-009	G11-A-010
Class 3 Areas	œ	∢



\* Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

Class 3 Areas									
A G11-A-011	ь.	883C (Extenor)	118	NA	ω	15-random 2-QC	15-random	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL <sub>W</sub> . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL <sub>W</sub> . A 5% scan on intenor & exceed the DCGL <sub>W</sub> . A 5% scan on intenor & greatest potential for contamination. Additional biassed measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biassed measurements are above and beyond requirements set forth in the RFETS PDSP. PDS Surveys are being conducted on the exterior surfaces of 883.C only blasses being the conducted will be characterized using the
A G11-A-012	m	890 (Intenor & Extenor)	179	58	O	15-random 2-QC	15-random	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGLw. Historical Site Assessment and process confidence that no individual measurement will exceed the DCGLw. A 5% scan on intenor & extenor surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements.
,		Class 3 Totals	20018	6400	694	355	355	0	set torth in the RFETS PDSP
All class Areas		Ali Ciass Totals	20018	6400	694	355	355		